

WHAT IS CLAIMED IS:

1. A fixing apparatus comprising:
 - a heating member;
 - a coil configured to apply a magnetic field for
 - 5 induction heating to the heating member;
 - a temperature sensor configured to detect the
 - temperature of the heating member;
 - a detection section configured to detect an amount
 - of variation per unit time of the temperature detected
 - 10 by the temperature sensor; and
 - an output control section configured increase or
 - decrease the output of the coil by an amount
 - corresponding to a result of detection by the detection
 - section, while holding the detected temperature of the
 - 15 temperature sensor within an initially set range.
2. A fixing apparatus according to claim 1,
wherein said unit time is a value proportional to the
magnitude of a heating capacity of the heating member.
3. A fixing apparatus according to claim 1,
- 20 further comprising a pressure applying member
configured to, while being set in pressure contact with
the heating member, convey a paper sheet for fixing in
a manner to sandwich the paper sheet relative to the
heating member.
- 25 4. A fixing apparatus comprising:
 - a heating member;
 - a coil for induction heating which is positioned

near the heating member;

a resonance circuit including the coil as
a constituent element;

5 a switching element configured to excite the
resonance circuit;

an oscillator configured to output an ON-OFF
signal for ON-OFF driving of the switching element;

a temperature sensor configured to detect the
temperature of the heating member;

10 a detection section configured to detect an amount
of variation per unit time of the temperature detected
by the temperature sensor; and

an output control section configured to increase
or decrease the duty of an ON-OFF signal outputted from
15 the oscillator by a value corresponding to a result of
detection by the detection section, while holding the
detected temperature of the temperature sensor within
an initially set range.

5. A fixing apparatus according to claim 4,
20 wherein said unit time is a value proportional to the
magnitude of a heat capacity of said heating member.

6. A fixing apparatus according to claim 4,
further comprising a pressure applying member
configured to, while being set in pressure contact with
25 the heating member, convey a paper sheet for fixing in
a manner to sandwich the paper sheet relative to the
heating member.

7. An image forming apparatus comprising:

a heating member;

a coil configured to apply a magnetic field for
induction heating to the heating body;

5 a temperature sensor configured to detect the
temperature of the heating body;

a detection section configured to detect an amount
of variation per unit time of the temperature detected
by the temperature sensor; and

10 an output control section configured to increase
or decrease the output of the coil by an amount
corresponding to a result of detection by the detection
section while holding the detected temperature by the
temperature sensor within an initially set range.

15 8. An image forming apparatus according to
claim 7, wherein said unit time is a value proportional
to the magnitude of a heat capacity of the heating
member.

20 9. An image forming apparatus according to
claim 7, further comprising a pressure applying member
configured to, while being set in pressure contact with
the heating member, convey a paper sheet for fixing in
a manner to sandwich the paper sheet relative to the
heating member.